

# JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA

## KAKINADA-533003, Andhra Pradesh, India

R-13 Syllabus for ECE, JNTUK

III Year-I Semester	L	T	P	C
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## **Pulse & Digital Circuits Lab(RT31047)**

### **Prerequisite Course:**

Need basic idea of Pulse & Digital circuit subject

## **Course Description and Objectives:**

• The students are required to develop the Wave shaping circuits, Multivibrators&sampling gates.

#### **Course Outcomes:**

Upon completion of the course, the student will be able to achieve the following outcomes.

COs	Course Outcomes	POs
1	will be able generate sinusoidal and non-sinusoidal signals	3
2	will be able to understand basic logic gates and can design applications	3
3	will be able to analyze various multi vibrator circuits	3
4	will be able to design non sinusoidal oscillator	3

### **SYLLABUS**

- 1. Linear wave shaping.
- 2. Non Linear wave shaping Clippers.
- 3. Non Linear wave shaping Clampers.
- 4. Transistor as a switch.
- 5. Study of Logic Gates & Some applications.
- 6. Study of Flip-Flops & some applications.
- 7. Sampling Gates.
- 8. Astable Multivibrator.
- 9. Monostable Multivibrator.
- 10. Bistable Multivibrator.
- 11. Schmitt Trigger.
- 12. UJT Relaxation Oscillator.
- 13. Bootstrap sweep circuit.

#### **EQUIPMENT REQUIRED FOR LABORATORY:**

1. RPS - 0 - 30 V

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- 3. Function Generators 0 1 M Hz
- 4. Components
- 5. Multi Meters